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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,282	03/18/2004	John F. Holzrichter	IL-11215	7446
7590	02/13/2006		EXAMINER	
Eddie E. Scott Assistant Laboratory Counsel Lawrence Livermore National Laboratory P.O. Box 808, L-703 Livermore, CA 94551			GOLUB, MARCIA A	
			ART UNIT	PAPER NUMBER
			2828	
			DATE MAILED: 02/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/804,282	HOLZRICHTER, JOHN F.
	Examiner	Art Unit
	Marcia A. Golub	2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,5 and 9 is/are rejected.
 7) Claim(s) 2-4,6-8,10 and 11 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/18/2004</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it is longer than 150 words.

Correction is required. See MPEP § 608.01(b).

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Applicant is advised that should **claims 1-4** be found allowable, **claims 5-8** will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 1, 5, 9 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 2, 25, 26, 35, 37 of prior U.S. Patent No. 6,693,943. This is a double patenting rejection. The rejection is based on the fact that a laser diode inherently comprises "a rear mirror, an output mirror, and a semiconductor laser material between said rear laser mirror and said output mirror."

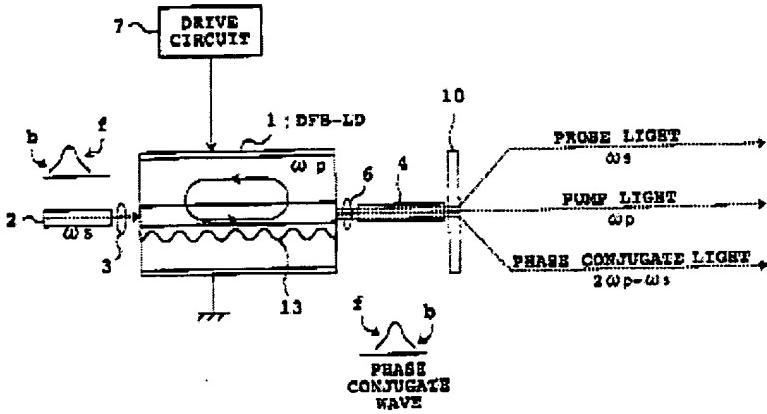
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (5,920,588).

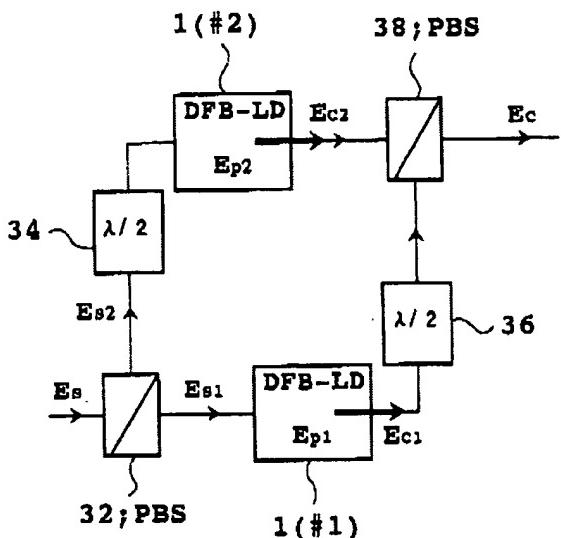


Regarding claims 1 and 5, Figs 2, 4 and 8 of Watanabe disclose "A system for generating a powerful laser beam, comprising: a laser element array including a first laser element [1(#1)] and at least one additional laser element [1(#2)], said first laser element and said least one additional laser element having a rear laser mirror [22], an output mirror [22], and semiconductor laser material [InGaAs] between said rear laser mirror and said output mirror;

an injector [electrodes 20, 21] for directing a first part of an injection laser signal [electrical current] into said first laser element and for directing at least one additional

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part of the injection laser signal into said at least one additional laser element; said laser element array transforming said first part of the injection laser signal and said at least one additional injection laser signal into a first circulating laser beam [ω_p] in said first laser element and at least one additional circulating laser beam in said at least one additional laser element; (16/59-64)



a reference laser beam source for directing a first part of a reference laser beam [signal light ω_s] into said first laser element [1] to mix with said first circulating laser beam [ω_p] and for directing at least one additional part of a reference laser beam into said at least one additional laser element [1(#2)] to mix with said at least one additional circulating laser beam;

an amplifier and phase conjugater for amplifying and phase conjugating said first part of a reference laser beam [E_{s1}] and said at least one additional part of a reference laser beam [E_{s2}] and producing a first amplified output laser beam [E_{p1}, E_{c1}] emanating

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from said first laser element [1(#1)] and at least one additional amplified output laser beam [E_{p2} , E_{c2}] emanating from said at least one additional laser element [1(#2)]; (17/4-8,24 18/9-10, 19/2-6)

and a combiner [38] for combining said first amplified output laser beam and said at least one additional amplified output laser beam into the powerful laser beam." (19/26-28, 42/27-28)

Regarding claim 9, the apparatus described above with reference to claims 1 and 5 discloses the functions and limitations of the method claim 9.

Allowable Subject Matter

Claims 2-4, 6-8, 10, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record at the time the invention was made does not disclose or suggest using an output mirror that is 100% reflective at normal incidence and <5% reflective at an input beam angle in combination with the rest of the limitations of the claim. It is also not obvious to inject the reference light into the system disclosed by Watanabe at a Brewster's angle ranging between 20 and 70 degrees.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Info

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcia A. Golub whose telephone number is 571-272-8602. The examiner can normally be reached on M-F 9-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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